REMARKS

Claims 1 - 37, 39 - 40, 42 - 47, 49 - 54, 56, 58 - 68 and 70 - 72 are pending in the present application. Claims 1, 22, 29, 32, 37, and 58-60 have been amended. Claims 71 and 72 have been added. No new matter has been added.

- 1. Claims 1-37, 39, 40, 42-47, 49-54, 58-68 and 70 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description. Applicants traverse the Examiner's rejection, support for the claim language cited by the Examiner is provided in the specification (see page lines 19-25). However, claims 1, 22, 32, 37 and 58 have been amended to delete this claim language, and therefore, the rejection is now moot.
- 2. Claims 1-37, 39, 40, 42-47, 49-54, 58-68 and 70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claims 1, 22, 32, 37 and 58 have been amended to delete this claim language, and therefore, the rejection is now moot.
- 3. Claims 1-6, 8-9, 11, 12, 15, 32-34, 36, 43, 44, 45 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Li (U.S. Patent 5,841,918).

Independent claims 1 and 32 have been amended to clarify the claim language. Claims 1 and 32 have been amended to include the limitation of "whereby at least one of the first reflective filter function and the second reflective filter function is not substantially flat over a substantial portion of the respective first or second reflective filter function."

Li, however, discloses tunable filters having filter functions that are both substantially flat over a substantial portion, as shown in Figs. 2a - 2c. Li does not teach or suggest the one of the tunable filters may have a filter function that is not substantially flat, as claimed by the Applicants.

Claims 2-6, 8-9, 11, 12, 15, 33, 34, 36, 43, 44, 45 and 47 variously depends on claims 1 and 32 and therefore, these claims are allowable for at least the reasons provided hereinbefore.

Applicants submit that claims 1-6, 8-9, 11, 22, 28-30, 32-34, 36, 43, 44, 45 and 47 are not anticipated by Li and therefore, it is respectfully requested that these claims be reconsidered and allowed.

4. Claims 58-62, 64 and 66-68 are also rejected under 35 U.S.C. 102(b) as being anticipated by Li (U.S. Patent 5,841,918).

Independent claim 58 has been amended to clarify the claim language. Claim 58 has been amended to include the limitation of "whereby the first reflection wavelength and the second reflection wavelength are substantially the same."

Li shows tunable filters having filter functions that are overlapping spectrally, as shown in Figs. 2a – 2c, but the center or reflection wavelength of the filter functions are not substantially the same or aligned. Li does not teach or suggest the center wavelength of the filter functions are substantially the same, as claimed by the Applicants.

Claims 59-62, 64 and 66-68 variously depends on claim 58 and therefore, these claims are allowable for at least the reasons provide hereinbefore.

Applicants submit that claims 58-62, 64 and 66-68 are not anticipated by Li and therefore, it is respectfully requested that these claims be reconsidered and allowed.

- 5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li U.S. Patent 5,841,918 in view of Kringlebotn et al. U.S. Patent 6,097,487. Claim 7 variously depends on claim 1 and therefore, claim 7 is allowable for at least the reasons provide hereinbefore.
- 6. Claims 10, 35 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li U.S. Patent 5,841,918 in view of Kewitsch et al. U.S. Patent 6,236,782. Claims 10, 35 and 63 are dependent on claims 1, 32 and 58, respectively, and therefore claims 10, 35 and 63 are allowable for at least the reasons provide hereinbefore.
- 7. Claims 13, 14, 16-19, 22-27, 29, 30, 37, 40, 42, 46, 49, 50, 51, 53, 54, 56, 65 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li U.S. Patent 5,841,918 in view of Fernald et al. U.S. Patent 6,229,827.

Regarding independent claim 22, the present claim comprises a tunable optical waveguide having a first and second inner core, wherein each inner core has a respective first and second reflective element. Each of the inner cores being connected optically to provide a tunable optical filter.

Li does not suggest or teach that the Bragg gratings of the optical filter may be included within a waveguide having two inner cores. Further, Li teaches away from this embodiment because Li teaches that the Bragg gratings are independently tuned to provide an optical filter that can tune both the wavelength and the bandwidth of the filter. Therefore, there is no incentive to combine Li and Fernald. Furthermore, even if the teaching of Li and Fernald were combined, the Applicants' claimed invention would not result.

Independent claim 37 has been amended to depend from claim 1, and therefore, claim 37 is allowable for at least the reasons provided hereinbefore.

Claims 13, 14, 16-19, 23-27, 29, 30, 40, 42, 46, 49, 50, 51, 53, 54, 56, 65 and 70 variously depend on claims 1, 22, 32 and 58, and therefore, these claims are allowable for at least the reasons provide hereinbefore.

- 8. Newly added claims 71 and 72 are allowable for reasons similar to that provided hereinbefore.
- 9. In view of the foregoing, it is respectfully requested that the application be reconsidered and allowed. If the Examiner is not prepared to allow all the claims in view of the discussion herein, Applicants hereby respectfully request a phone interview with the Examiner at the Examiner's earliest convenient. Applicants' counsel can be reached at 203-626-3502 between the hours of 8:00 a.m. and 5:00 p.m., or by E-mail at rcrawford@cidra.com.

10. A petition for a three-month extension of time under 37 CFR 1.136 is submitted herewith. Please charge the fee of \$110.00 for a one-month extension of time and \$86.00 for one additional independent claim submitted by amendment to Deposit Account No. 50-0260 Order No. CC-0273. Any deficiency or overpayment should be charged or credited to this deposit account.



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